

Date: 25 February 2013

To: Carroll Mortensen, Executive Director for CalRecycle

From: Tedd Ward, M.S.  
Co-Chair of the California Resource Recovery  
Association's Global Recycling Council

Subject: Public Comment regarding:  
'California's New Goal: 75% Recycling

Thank you for the opportunity to comment on this ambitious set of ideas to increase reuse, recycling and composting in California. I have been working in integrated waste management since 1990, including periods when I served as a recycling market development consultant, as a professor teaching solid waste management in the Environmental Resources Engineering Department at Humboldt State University, and as a program manager for a rural regional joint powers authority for the past twenty years. It is from my deep personal belief that we can and should dramatically improve the efficiency of our material and energy economy for the sake of future generations and from my professional background and experiences that I offer these comments. These same motivations drove me to become Co-Chair of CRRRA's Global Recycling Council which promotes three broad policies: Zero Waste, End Welfare for Wasting, and Jobs from Design and Discards, and to speak as an advocate for Extended Producer Responsibility policies at the CRRRA-organized workshop in Oakland addressing these topics on 13 February 2013 in Oakland, California.

For clarity and consistency, I will group my comments according to the topic areas as presented in the document 'California's New Goal: 75% Recycling.'

### **Activities to Track**

As the 75% recycling target is an effort to improve the material and energy efficiency of our material economy while reducing greenhouse gas emissions, CalRecycle should also maintain, perhaps in cooperation with the Department of Resources or the Bureau of Mines, some measure of the quantity of mining and extraction by-products (mining tailings, fracking wastewater, mining wastes, etc.) generated in California. Though these mining-related waste materials are not included in the 'Base,' 'Target' or 'Activities,' as reuse, salvage, and recycling activities become more prominent features of California's economy, these mining wastes will also be reduced. As the Tellus Institute's packaging study demonstrated, the primary environmental benefits of reuse and recycling is the reduced need to mine, extract and process new raw materials to replace those that have been wasted in incinerators or

landfills. By not including these mining and energy-related wastes - including the potential measurement of the reduction in greenhouse-gas production associated with our material economy - documentation of these additional environmental benefits as materials are reused and recycled more becomes less tangible.

### **1.a. Increase Recycling Infrastructure**

In addition to the financial supports for increasing and expanding recycling and composting infrastructure, which I support, I think CalRecycle should also support legislation or regulation that requires a connection between the facilities identified in the non-disposal facilities element for each jurisdiction and the zoning and allocation of public facility spaces included in each City or County General Plan as it is updated. This is especially important for the development of new facilities to process yard debris into compost or mulch products, as well as for the siting of new facilities to process construction and demolition debris or recyclables.

### **1b – Regulatory Oversight**

Having worked for a rural regional agency with >70 inches of rain annually, I have seen the challenges of CalRecycle regulators trying to consistently apply regulations drafted for drier, more urban circumstances to our region, with the result appearing as aggressive enforcement for questionable environmental benefits in ways that dramatically impacted operating expenses. I believe regulatory oversight would be more effective if CalRecycle would set up regional offices so regulators might become more familiar with the facilities they regulate. Similarly, I think it would be better to generally organize such oversight geographically, with one regulator perhaps responsible for landfills, compost facilities, transfer stations, and recycling facilities in a region rather than to have for example, a team including ‘a compost facility regulator, a landfill inspector, and a transfer station regulator’ traveling across the State to focus on their specific target facility types.

### **1c – Strategic Facilitation and Incentivizing of Facility Siting**

I think CalRecycle should support legislation or regulation that requires a connection between the facilities identified in the non-disposal facilities element for each jurisdiction and the zoning and allocation of public facility spaces included in each City or County General Plan as it is updated. This is especially important for the development of new facilities to process yard debris into compost or mulch products, as well as for the siting of new facilities to process construction and demolition debris or recyclables.

### **1d – Modify RMDZ Program to be Statewide**

I support the idea of continuing financial support for the Recycling Market Development Zones, though perhaps the financial incentives should be expanded to more than low-interest loans, which are somewhat less attractive during periods (like now) when interest rates on new loans are near historic lows. If any of the current financial and technical assistance available in current RMDZs is to be expanded to all of California, I suggest that such expansions should be targeted to expand the processing and end-market facilities when rapid expansion is required – such as for the roll-out of a product

stewardship program for a material for which few such facilities exist (e.g for asphalt roofing shingles or gypsum sheet rock).

#### **1e – Increase Recycling Manufacturing Business Assistance**

While I generally support this concept, I feel there are several ways to make this more practically effective. First, I believe a graduate-level degree should be offered within the UC or CalState University system for Recycling Market Development. Such a program would expand the pool of Californians who understand the multi-faceted issues facing recycling-based ventures, including the challenges of product development, sourcing secondary materials, addressing contamination issues, permitting challenges, and marketing. Also, I believe CalRecycle and DTSC should engage in training and certification of packaging engineers in California to accelerate an increase in recycled-content packaging, and to educate such engineers on the challenges posed by composite packaging.

#### **1f – Increase Collection Efficiency / Quality**

The development and dissemination of information on the efficiency of different collection strategies would be helpful.

#### **1g – Streamline Planning Documents**

I support the elimination of the requirement for a Five Year review of each CIWMP or RAIWMP. CalRecycle should continue to require the electronic annual reports, and from these select two or three non-grant-related program expansions or modifications to monitor in detail each year for each jurisdiction. This would allow local governments to focus their efforts and encourage a more cooperative and focused process for CalRecycle to provide targeted technical assistance while providing oversight in specific program areas.

#### **1h – Communications Outreach on Infrastructure**

Generally, I don't think CalRecycle needs to spend resources doing general outreach and education regarding the need to expand recovery infrastructure. I think a more effective use of such outreach would be to conduct outreach to stimulate demand for compost and mulch products, or to provide additional supports to expand use of rubberized asphalt and other recycled products with potential to absorb significant fractions of recovered materials.

#### **2a – Greenwaste ADC**

As Alternative Daily Cover provides an economic benefit for the landfill operator reducing the need for cover soil or tarps, I think that activity should still be allowed, it just should not count as any kind of recycling. I don't think it is necessary to require that yard debris be subject to a tipping fee.

#### **2b – Organics Disposal Phase-Out**

For control of greenhouse gases, I think a phase-out of the disposal of yard debris organics in California landfills – especially at facilities without capture and control of

landfill gases - would be a wise course of action to reduce methane generation at these landfills lacking gas capture.

### **2c – Funding for Organics / Recovery Infrastructure**

I believe that public infrastructure development will be critical to the achievement of the 75% target, and I support the use of either Cap and Trade proceeds or a portion of the IWMA Tip fee for this purpose. I encourage CalRecycle to not restrict financial support to Organics infrastructure alone, as over time in many communities additional infrastructure development may be critical, such as for a C&D Recovery facility, and a similar financial support mechanism may be useful for that purpose as well. It seems that the Local Task Force should make some finding about the critical nature of such a recovery facility (or facilities) before CalRecycle resources would be available for such developments.

### **2d – Indirect Incentives**

I am not clear how such strategies could be implemented in a way that customers will choose to use compost and mulch products due to their calculated GHG reductions.

### **2e – Regulatory Changes**

I support such changes – particularly changes that incentivize local governments, public works and roads department and major landscaping contractors to use compost and mulch products, or to incorporate food processing into existing organics processing methods in ways that do not compromise public safety.

### **2f – Cross-Agency Regulatory Issues**

I support either streamlining or regionalizing the permitting process for processing facilities for organics, recyclables, metals yards, or construction and demolition debris. Please see my comments on item 1b.

### **2g – Biomethane Pipeline Issue**

No opinion. I don't believe a biomethane pipeline will ever be cost-effective to route through our County.

### **3a – Reduce Thresholds for Commercial Recycling**

As currently structured, there is no provision for enforcement of the commercial recycling mandate, and I do not support asking businesses to document the tons they recycle annually. In our rural County, we don't even require business licenses, so we are not inclined to require that they more accurately document their recycling than the very existence of their business. If the commercial recycling mandate was extended to all businesses disposing of more than 2 cubic yards per week, we could implement that expansion with relatively little effort.

### **3b – Increase Requirements for MRF Performance**

Materials Recovery Facilities are not all the same, and so standardizing performance standards or best practices must consider the design, capacity, and practicalities at

each location. If CalRecycle is interested in improving MRF performance, I think regional or web-based training for MRF Operators might achieve as much or more than pursuing such additional regulatory authority.

### **3c – Establish Business Enforcement Component**

I support CalRecycle enforcement of the Commercial Recycling mandate. Local enforcement undermines our role of explaining what services and compliance options are available.

### **3d – Grants for Multi-Family Recycling Programs**

CalRecycle can help foster the expansion of multi-family recycling programs by supporting development of outreach materials and distribution of in-apartment containers. This can be accomplished by a grant program, by making CalRecycle translators available to translate outreach materials to reach non-English communities, and perhaps by bulk purchases of a variety of in-apartment containers to store recyclables and organics.

### **3e – Awards for Businesses**

I support transforming the WRAP program to include a wider spectrum of praiseworthy or potentially award-winning performance, including GHG reduction, reduced toxicity of production or packaging, or the other criteria identified within the 75% plan.

### **4a – EPR Authority to Decide Products and Targets**

Extended Producer Responsibility (EPR) programs will need to be an essential feature of CalRecycle's efforts to reach our 75% recycling goal and continue progress towards Zero Waste. With recent experience in the roll-out of programs with EPR elements being implemented in California for mercury thermostats, carpeting, and paint, CalRecycle is poised to deploy EPR programs to address specific product categories on a more systematic basis. Because of this great potential, it is all the more important the CalRecycle maintain focus on circumstances where EPR can be a new comprehensive solution *where none currently exists*.

Critical to the success of these efforts will be the permanent establishment of monitoring and oversight responsibilities within CalRecycle to assure Performance, Accountability, Transparency, and Access to Market/No Free Riders for each new EPR system. Additionally, CalRecycle needs to establish a consistent process by which new product categories are selected for EPR implementation, and to host periodic forums on the effectiveness of specific EPR programs.

Equally important will be the distinctions drawn between the EPR programs for product categories that are 1) candidates because of their hazardous aspects or materials (such as sharps or pesticides), or 2) their prominence in the composition of materials disposed with few reliable markets (such as drywall or asphalt roofing), or 3) Product categories that are significant fractions of the materials disposed but with significant established markets (such as packaging). I believe that CalRecycle should prioritize implementation of EPR programs for the first two categories listed above, but that the third category may benefit more directly from other policy strategies such as minimum content requirements.

For products targeted for EPR programs due to the hazards of the product and its prevalence in the waste stream, its potential for mis-use or abuse, or as an illegally disposed item, CalRecycle should consult with agencies such as DTSC, DOT, AMA or the CA Dept. of Pesticide Regulation to identify and prioritize household hazardous products for EPR program implementation.

For products, materials, or composites that comprise more than 0.5% of all California discards, which are relatively uniform and readily collected, but which fall well short of the 75% recycling target, CalRecycle may implement some form of EPR program to increase recovery of such materials.

Also, as the roll-out of the paint and carpet EPR programs in California have demonstrated, local governments and small businesses processing recovered materials will need access to mechanisms to negotiate model agreements with product stewardship organizations as EPR programs are implemented.

#### **4b – EPR for Packaging**

For products that generally have existing recovery and end-user markets, including most beverage container materials (except composites) and metals, extended producer responsibility programs are less appropriate and potentially more disruptive to existing markets. Small recovery businesses tend to be concerned that a product stewardship organization (PSO) set up to address packaging statewide would not allow such small businesses to continue to expand unless they were tied to one of the major companies involved in establishing the PSO. I believe that CalRecycle may more effectively engage in such markets by adopting laws and regulations regarding minimum content standards, or bans of problematic packaging materials (e.g. PVC, heavy metal-based pigments), rather than EPR programs.

#### **5a – Redefine Commingled Rate**

Support.

#### **5b – Expansion of Minimum Content Requirements**

I support the imposition of minimum content requirements on all packaging materials, and increasing the penalty if such minimum content requirements are not met. Just as a reminder, the minimum content requirements for newsprint used to print newspapers sold in California essentially established a strong recycling foundation for all newsprint collected even without deposits, a bottle bill, or EPR. This minimum content requirement for newsprint continues to function with minimal oversight or regulatory costs over 20 years after it was passed into law.

#### **5c – Program Expansion of all Ready-to-Drink Beverages**

Support.

#### **5d – Elimination of 14581 Fixed Dollar Expenditures**

Support.

#### **5e – Fiscal Reform to Provide More Funding**

The processing fee of AB2020 is one of the important feedback systems potentially influencing the choice of package by manufacturers, with more difficult to recycle materials being subject to higher processing fees. I don't support eliminating this important feedback system.

#### **6a – Increase PCRC and EPP Purchases by the State**

Support. To expand secondary materials markets, particular focus should be applied to agencies that potentially or actually use large quantities of compost, mulch, or which have need for roadbase, bank stabilization, embankments, or levies.

#### **6b – Reform SABRC Requirements and Add Enforcement**

Support. Perhaps rather than enforcement, CalRecycle should make some funds available to other State agencies for the purpose of demonstrating the performance of recycled-content or environmentally-preferable product(s).

#### **6c – Interagency Agreement with CalTrans and others for Testing TDPs**

Support.

#### **6d – Minimum Content Requirements**

Support for all packaging materials, and not just for products purchased by State agencies. For example, the minimum content requirements for newsprint and plastic bags apply to all such products, not just those purchased by the State.

#### **6e – Sales Tax Breaks on Private Sector Purchase of RCPs/EPPs**

I don't support a different sales tax structure for RCPs or EPPs, as it would be significantly more challenging to implement than minimum content standards with reduced likelihood of success.

#### **6f – Financial Incentives for Manufacturer Use of Recycled Materials**

Support.

#### **7a – Tire Incentive Payments, EPR, of More Market Demand**

I support option 2: a transition from California's current ARF fee to an EPR system for tires sold in California. The State has worked hard for over 20 years to develop tire markets, but tires remain an item regularly disposed of illegally, and in many locations, cutting tires for legal disposal is more economically feasible than recovery. Though I support a CA EPR system for tires, as CalRecycle's efforts to transition to that system should be aware that economics will drive most major tire processors to a centralized system of whole tire incineration as part of the manufacture of cement. Monitoring, oversight, maintaining a level playing field, and reporting will be critical to the success of such an EPR system for tires.

#### **7b – Plastics**

Any comprehensive strategy to address plastics in the waste stream, in the oceans, or as litter must forthrightly acknowledge the mass-balance of a petroleum economy: for every gallon of fuel used in our economy, some by-products of the fuel-refining process

are most cost-effectively made into plastic products rather than being handled as hazardous wastes. So recycling of plastics does not address this fundamental feature of our petroleum-based economy, for no matter how much plastic was recycled yesterday, the fuel we have burned today will almost certainly result in more new plastics being made tomorrow. So I think plastics need to be banned from dissipative uses, such as 'to-go' containers and single-use items. Similarly, I think there should be some regulatory agency, perhaps CalRecycle, in the role of determining if a new plastic composite material can be used for packaging if it does not have an established recovery market in California.

#### **7c – E-Waste**

I support adding new device categories into the current payment system, and planning for how the current system could be transitioned to an EPR system. As the current system has evolved over several years, I think such an analysis is necessary to evaluate the pros and cons of transitioning to an EPR-style system.

#### **7d – C&D Funds for Retrofitting Equipment to meet AQ Standards**

Support. On-site or decentralized processing options need to be accommodated if we are to dramatically expand recovery of C&D materials.

#### **7e – C&D: Expand CALGreen for Deconstruction and Add Enforcement**

Support.

#### **7f – Fiber: Bans on Cardboard going into Landfills**

Generally, I don't support bans without a plan. However, corrugated cardboard is readily recycled throughout California. Much remains disposed in circumstances where disposal is more convenient than recycling. I suggest that any cardboard disposal ban be coupled with a requirement that moving companies, shipping companies and grocery stores must TakeBack flattened corrugated cardboard from the public. Support.

#### **7g – Fiber/Resin: Grants/ Payments for Mid-scale manufacturing and source reduction**

I don't support this. Most plastic source reduction has been lightweighting of packages, which in reality does little to address the ubiquity of plastic waste.

#### **7h – Used Oil LCA Follow-ups**

Support.

#### **8a – New Models for Funding Waste/Materials Management**

Support. CalRecycle must have a dependable source of funding to implement and oversee programs for which they are responsible.

#### **9a – Organics Food Programs, Backyard Composting, Vermicomposting**

Support. CalRecycle could also produce generic how-to training modules for backyard composting and vermicomposting, and generally I think this is a better topic for outreach statewide than the topic under 1h. Furthermore, CalRecycle could support a tiered



approach toward food residuals (processing in order of recovery hierarchy: e.g. freezing for later human consumption, animal feed, composting, etc.).

### **9b – Greener Products through Product Certifications / Eco Labels**

Though I support eco-labeling, I think if CalRecycle engages on labeling issues, there are more significant gains to be made by prohibiting new products that ‘spoil’ the recovery system. For example, a little PVC will contaminate a whole bunch of PET and make it unrecyclable. Rechargeable alkaline batteries or single-use lithium-ion batteries make future battery recycling significantly more challenging. I suggest a first step towards eco-labelling would be empower CalRecycle to regulate such recycling system ‘spoil,’ or to begin negotiations for labeling in advance of EPR program roll-outs.

### **9c – Promotion of Local Zero Waste Activities**

Very much support. Furthermore, CalRecycle should engage in making sure that the main houses of community reuse – Libraries – continue to be adequately funded. I think grants or other resources allocated to promotion of Zero Waste plans and activities should also be available for more focused efforts to support libraries or other reuse centers. Similarly, those maintaining on-line resources like Freecycle or any other method to foster reuse in a community should be eligible for such support.

### **10a – Define Post-Recycled Residuals**

I don’t support this, and cynically suspect this is a prelude to renewed efforts to expand incineration in California. I am not clear on the benefits of this strategy.

### **10b – Define Beneficial Use Policy for other 25%**

I think this effort would be best focused on discard materials that still may be used with some modifications. For example, chunks of used concrete slabs may be used to stabilize embankments. If regulations were developed that would help guide County engineers in the use of such materials, this could potentially increase demand for used concrete slabs significantly. I think such a targeted approach is more appropriate than researching the potential uses of incinerator ash, which could be viewed as a subsidy of the incineration developers.